

## SUMMARY SAMPLES

### **Title -Russia lawmakers vote to annex Crimea; U.S. steps up sanctions.**

**Kiev (CNN)** -- Russia's lower house of parliament overwhelmingly approved a treaty Thursday to annex the Black Sea peninsula of Crimea from Ukraine, prompting tougher sanctions from the United States. Russia responded with its own sanctions against a list of U.S. officials and lawmakers. After Russian Foreign Minister Sergey Lavrov had presented the treaty and urged lawmakers to accept the region as a part of the Russian Federation, the document was approved on a vote of 443 to 1. Russia's Federation Council, the upper house of the parliament, will hold a similar vote Friday, completing ratification of a treaty that was signed by President Vladimir Putin on Tuesday. Speaking "on behalf" of Putin, Lavrov had told the State Duma that folding Crimea into Russia was needed to protect ethnic Russians there. "I am certain that passing the document will become a turning point in the destiny of multi-ethnic nations of Crimea and Russia, who are related with close ties of the historical unity," Lavrov said. Russia's moves to annex Crimea have turned a confrontation with Europe and the United States into the biggest crisis in East-West relations since the Cold War. Approval of the treaty in the State Duma was in no doubt as Russia has stood defiant despite Western leaders denouncing Moscow's actions as a violation of Ukraine's sovereignty and a breach of international law. European Union leaders said Thursday they will sign a political association agreement with Ukraine and add 12 more people to the list of individuals targeted for sanctions. EU member states also are threatening possible tougher targeted measures if Russia escalates the situation in Ukraine, European Council President Herman Van Rompuy told reporters. "We all must remain cool-headed," he said. U.S. and EU officials had already imposed sanctions on more than two dozen Russian and Crimean officials, and urged Russia to avoid escalating the crisis -- a call Moscow has ignored. But U.S. President Barack Obama on Thursday announced more sanctions on individuals and one bank in response to Russia's annexation moves. He also signed a new executive order that authorizes possible further sanctions on what he called "key sectors" of the Russian economy if Moscow does not act to deescalate the situation. "This is not our preferred outcome. These sanctions would not only have a significant impact on the Russian economy, but could also be disruptive to the global economy," he said. "However Russia must know that further escalation will only isolate it further from the international community." Russia must respect "basic principles" of sovereignty and territorial integrity, he said, adding that the United States should also provide financial support for Ukraine's government and people. "We want the Ukrainian people to determine their own destiny and have good relations with the United States, Russia, Europe -- anyone they choose," he said, calling for continued diplomatic efforts.

The new U.S. sanctions target 20 officials, including senior Russians and "cronies" who hold significant influence in the Russian system, as well as one bank that holds "significant" resources, a senior U.S. administration official told reporters. That bank was listed by the U.S. Treasury Department as Bank Rossiya. The [individuals named by the Treasury](#) include major Putin allies, both in the Kremlin and in business. Among the 16 government officials listed are Putin's chief of staff, Sergei Ivanov; the speaker of the State Duma, Sergey Naryshkin; and Viktor Ozerov, chairman of the Security and Defense Committee of the Russia parliament's upper house. Four others were named as members of the government's inner circle. They are financier Yuri Kovalchuk, labeled Putin's personal banker by a senior U.S. administration official; magnate Gennady Timchenko, whose activities in the energy sector have been directly linked to Putin, according to the Treasury; and businessmen Arkady and Boris Rotenberg.

Swedish Foreign Minister Carl Bildt told CNN's Christiane Amanpour that the new round of U.S. sanctions would be "significantly more powerful than the first one." The latest round "hits significant economic interests that are fairly close to the ruling circles in Moscow. It will be noticed," he said. Russia responded with sanctions against nine U.S. officials and lawmakers, including speaker of the U.S. House of Representatives John Boehner, Senate Majority leader Harry Reid and Sens. John McCain, Robert Menendez, Daniel Coats and Mary Landrieu, according to a list published by the Russian Foreign Ministry. Boehner's spokesman, Michael Steel, said the lawmaker was "proud to be included on a list of those willing to stand against Putin's aggression." McCain responded, "I guess this means my spring break in Siberia is off, my Gazprom stock is lost, and my secret bank account in Moscow is frozen. Nonetheless, I will never cease my efforts on behalf of the freedom, independence, and territorial integrity of Ukraine, including Crimea." The U.S. Treasury said Bank Rossiya is controlled by Yuri Kovalchuk and is the 17th-largest bank in Russia. It has \$10 billion in assets and handles the accounts of some top government officials, the Treasury said, adding that the bank has relationships with banks in the United States, Europe, and elsewhere. The bank also provides services to the oil, gas and energy sectors, it said. "As a result of Treasury's action, any assets of the persons designated today that are within U.S. jurisdiction must be frozen," the Treasury said. British Prime Minister David Cameron told reporters at the EU Heads of State or Government summit there would likely be more asset freezes and travel bans. Finland's Minister for European Affairs and Foreign Trade Alexander Stubb told CNN more names would be added Thursday. "There will probably be over 10 new names on the list and then of course people are going to argue, are these people good to be on the list, bad to be on the list are they to be taken seriously and so on, but there will be more names," Stubb said. Lavrov told lawmakers that sanctions "have never brought any positive results" and that there were no legal grounds for them.

Russia's defense minister assured U.S. Defense Secretary Chuck Hagel in phone call Thursday that Russian troops on the Ukraine border do not intend to cross the border or take aggressive action, Pentagon spokesman Rear Adm. John Kirby said. Hagel made it clear in the lengthy and sometimes "direct" talk with Russian Defense Minister Sergey Shoigu that the Russians bear responsibility for what happens in Crimea, including the recent violence, since they are in control there, Kirby said. While Russia insists its actions are legitimate, Ukraine's parliament said Thursday that Kiev will never stop fighting for Crimea, even if the country's new leaders have discussed evacuating military personnel from the region. In a declaration published online, the Kiev parliament said "Crimea was, is and will be part of Ukraine." "The Ukrainian people will never, under no circumstances, stop fighting for the liberation of Crimea from the occupants, no matter how hard and long it is." Putin announced the annexation of Crimea after voters in the semi-autonomous territory approved a hastily called weekend referendum on separating from Ukraine. Kiev officials unveiled new measures against Russia and the "self-proclaimed" authorities in Crimea. In a televised briefing, Andriy Porubiy, secretary of the national defense and security council, said that if the United Nations designates Crimea a "demilitarized zone," Ukraine is prepared to evacuate its military personnel and family members. Ukraine has facilities ready to accommodate 25,000 evacuees. A statement on the Ukrainian presidential website said former Presidents Leonid Kravchuk and Leonid Kuchma had asked Turchynov to redeploy soldiers who are still in Crimea to the mainland. The call was "to protect and save lives of Ukrainian servicemen who bear service in difficult and dangerous conditions in Crimea," the statement said. Porubiy had also said the measures included a full-scale visa system for Russians. Speaking in Brussels on Thursday, Prime Minister Arseniy Yatsenyuk said Kiev was in no hurry to impose a visa regime on Russia, since it could negatively affect Ukrainians living in the predominantly Russian-speaking east of the country. Yatsenyuk is in Brussels to sign the political part of an association agreement with the European Union. Lavrov said the intention to introduce visa regulations was "surprising and regrettable." As diplomatic efforts to resolve the crisis continue, U.N. Secretary-General Ban Ki-moon traveled to Russia Thursday, where he met Putin and Lavrov. He will then head to Kiev where he

will meet acting Ukrainian President Oleksandr Turchynov and Yatsenyuk on Friday. Russia's Interfax news agency quoted Ban as saying during a meeting with Putin that he was "deeply concerned" by the situation involving Ukraine and Russia.

Ukraine's navy commander, detained when supporters of Russia took over the naval headquarters in Crimea, was released, the presidential website said Thursday. Amid signs the uneasy standoff between pro-Russian and Ukrainian forces could ignite into bloody conflict, about 300 armed men stormed the naval base in Sevastopol on Wednesday. They took away Ukrainian navy chief Sergey Gaiduk. Turchynov issued a 9 p.m. (3 p.m. ET) deadline for Crimea to release all hostages and stop all provocations. Kiev's new leaders had warned that if all hostages, including Gaiduk, were not released by then, authorities would take action of "technical and technological character," probably meaning turning off utilities. A statement on the presidential site said Gaiduk and several other hostages had been freed. They were released during the night and were on their way to Kiev Thursday. Russian Defense Minister Sergey Shoigu had asked authorities in Crimea to free Gaiduk and allow him safe passage out of the region.

The incident at the navy headquarters came a day after one member of the Ukrainian military was killed when masked gunmen seized their base near the Crimean regional capital, Simferopol. After that fatality -- the first Ukrainian military death since the Crimean crisis erupted about three weeks ago -- Ukraine's Defense Ministry authorized its forces to open fire in self-defense.

#### SUMMARY -

- Kiev (CNN) -- Russia's lower house of parliament overwhelmingly approved a treaty Thursday to annex the Black Sea peninsula of Crimea from Ukraine, prompting tougher sanctions from the United States.
- After Russian Foreign Minister Sergey Lavrov had presented the treaty and urged lawmakers to accept the region as a part of the Russian Federation, the document was approved on a vote of 443 to 1.
- Russia's moves to annex Crimea have turned a confrontation with Europe and the United States into the biggest crisis in East-West relations since the Cold War.
- European Union leaders said Thursday they will sign a political association agreement with Ukraine and add 12 more people to the list of individuals targeted for sanctions.
- "There will probably be over 10 new names on the list and then of course people are going to argue, are these people good to be on the list, bad to be on the list are they to be taken seriously and so on, but there will be more names," Stubb said.
- As diplomatic efforts to resolve the crisis continue, U.N. Secretary-General Ban Ki-moon traveled to Russia Thursday, where he met Putin and Lavrov. He will then head to Kiev where he will meet acting Ukrainian President Oleksandr Turchynov and Yatsenyuk on Friday.

Business Article -

**Title - Netflix blasts Internet providers: 'Consumers deserve better'.**

Netflix isn't backing down in its fight against the country's largest Internet service providers. Netflix (NFLX) CEO Reed Hastings sounded off Thursday against big ISPs like Verizon (VZ, Fortune 500) and Comcast (CMCSA, Fortune 500), accusing them of compromising Internet freedom and degrading the experience of consumers.

Hastings' blog post is the latest salvo in Netflix's dispute with these firms over whether it should help pay the cost of delivering its data-heavy content.

"Some big ISPs are extracting a toll because they can -- they effectively control access to millions of consumers and are willing to sacrifice the interests of their own customers to press Netflix and others to pay," Hastings wrote. "Though they have the scale and power to do this, they should realize it is in their long term interest to back strong net neutrality." "Net neutrality" is the principle that ISPs should keep all online content equally accessible. The issue flared up earlier this year following news that Netflix streaming speeds for customers of ISPs including Verizon and Comcast were slowing, as these firms attempted to extract a fee from Netflix in exchange for connecting directly to their networks and resolving the issue. Netflix announced an agreement with Comcast last month in which it will indeed pay for a connection, and has been in talks with Verizon as well. But Hastings said the company was engaging in these talks "reluctantly." "If this kind of leverage is effective against Netflix, which is pretty large, imagine the plight of smaller services today and in the future," Hastings wrote.

"Netflix believes strong net neutrality is critical, but in the near term we will in cases pay the toll to the powerful ISPs to protect our consumer experience."

Related: New chapter begins in net neutrality fight Net neutrality advocates faced a setback earlier this year, when Verizon convinced a judge to strike down the Federal Communications Commission's regulations on the issue. The FCC is now attempting to craft new net neutrality regulations that will better withstand legal scrutiny. But the FCC's rules will only cover how ISPs treat traffic on their own networks; they don't address the issue of connections between networks, which is at the heart of the Netflix dispute. "The traditional form of net neutrality which was recently overturned by a Verizon lawsuit is important, but insufficient," Hastings said. "Without strong net neutrality, big ISPs can demand potentially escalating fees for the interconnection required to deliver high quality service." Other big tech companies, including Microsoft (MSFT, Fortune 500), Google (GOOG, Fortune 500) and Facebook (FB, Fortune 500), already have paid-connection deals with big ISPs. Given the massive amount of data consumption Netflix generates -- around a third of traffic online during peak hours -- the big ISPs argue that it should help foot the bill for delivery. But Hastings says Netflix is simply satisfying requests from the ISPs' customers, who pay steep monthly bills in the expectation that their content will be delivered at a certain speed regardless of where it comes from. In many places, he noted, consumers have

just one or two choices for broadband Internet service. "The big ISPs can make these demands -- driving up costs and prices for everyone else -- because of their market position," Hastings wrote. Comcast vice president David Cohen said in a statement that the FCC's net neutrality rules were never designed to deal with paid connections between networks, "which have been an essential part of the growth of the Internet for two decades."

"Providers like Netflix have always paid for their interconnection to the Internet and have always had ample options to ensure that their customers receive an optimal performance through all ISPs," Cohen said. "We are happy that Comcast and Netflix were able to reach an amicable, market-based solution to our interconnection issues and believe that our agreement demonstrates the effectiveness of the market as a mechanism to deal with these matters." Verizon declined to comment; AT&T (T, Fortune 500) and Time Warner Cable (TWC, Fortune 500) did not respond to requests for comment.

#### Summary -

- Netflix (NFLX) CEO Reed Hastings sounded off Thursday against big ISPs like Verizon (VZ, Fortune 500) and Comcast (CMCSA, Fortune 500), accusing them of compromising Internet freedom and degrading the experience of consumers.
- Hastings' blog post is the latest salvo in Netflix's dispute with these firms over whether it should help pay the cost of delivering its data-heavy content.
- "Some big ISPs are extracting a toll because they can -- they effectively control access to millions of consumers and are willing to sacrifice the interests of their own customers to press Netflix and others to pay," Hastings wrote.
- "Though they have the scale and power to do this, they should realize it is in their long term interest to back strong net neutrality."
- But Hastings says Netflix is simply satisfying requests from the ISPs' customers, who pay steep monthly bills in the expectation that their content will be delivered at a certain speed regardless of where it comes from. In many places, he noted, consumers have just one or two choices for broadband Internet service.

#### Science Article -

Title -Moon of Saturn: Surface of Titan sea is mirror smooth.

New radar measurements of an enormous sea on Titan offer insights into the weather patterns and landscape composition of the Saturnian

moon. The measurements, made in 2013 by NASA's Cassini spacecraft, reveal that the surface of Ligeia Mare, Titan's second largest sea, possesses a mirror-like smoothness, possibly due to a lack of winds. "If you could look out on this sea, it would be really still. It would just be a totally glassy surface," said Howard Zebker, professor of geophysics and of electrical engineering at Stanford who is the lead author of a new study detailing the research. The findings, recently published online in *Geophysical Research Letters*, also indicate that the solid terrain surrounding the sea is likely made of solid organic materials and not frozen water. Saturn's second largest moon, Titan has a dense, planet-like atmosphere and large seas made of methane and ethane. Measuring roughly 260 miles (420 km) by 217 miles (350 km), Ligeia Mare is larger than Lake Superior on Earth. "Titan is the best analog that we have in the solar system to a body like the Earth because it is the only other body that we know of that has a complex cycle of solid, liquid, and gas constituents," Zebker said.

Titan's thick cloud cover makes it difficult for Cassini to obtain clear optical images of its surface, so scientists must rely on radar, which can see through the clouds, instead of a camera. To paint a radar picture of Ligeia Mare, Cassini bounced radio waves off the sea's surface and then analyzed the echo. The strength of the reflected signal indicated how much wave action was happening on the sea. To understand why, Zebker said, imagine sunlight reflecting off of a lake on Earth. "If the lake were really flat, it would act as a perfect mirror and you would have an extremely bright image of the sun," he said. "But if you ruffle up the surface of the sea, the light gets scattered in a lot of directions, and the reflection would be much dimmer. We did the same thing with radar on Titan." The radar measurements suggest the surface of Ligeia Mare is eerily still. "Cassini's radar sensitivity in this experiment is one millimeter, so that means if there are waves on Ligeia Mare, they're smaller than one millimeter. That's really, really smooth," Zebker said. One possible explanation for the sea's calmness is that no winds happened to be blowing across that region of the moon when Cassini made its flyby. Another possibility is that a thin layer of some material is suppressing wave action. "For example, on Earth, if you put oil on top of a sea, you suppress a lot of small waves," Zebker said. Cassini also measured microwave radiation emitted by the materials that make up Titan's surface. By analyzing those measurements, and accounting for factors such as temperature and pressure, Zebker's team confirmed previous findings that the terrain around Ligeia Mare is composed of solid organic material, likely the same methane and ethane that make up the sea. "Like water on Earth, methane on Titan can exist as a solid, a liquid, and a gas all at once," Zebker said. Titan's similarities to Earth make it a good model for our own planet's early evolution, Zebker said. "Titan is different in the details from Earth, but because there is global circulation happening, the big picture is the same," he added. "Seeing something in two very different environments could help reveal the overall guiding principles for the evolution of planetary bodies, and help explain why Earth developed life and Titan didn't."

Summary -

- New radar measurements of an enormous sea on Titan offer insights into the weather patterns and landscape composition of the Saturnian moon. The measurements, made in 2013 by NASA's Cassini spacecraft, reveal that the surface of Ligeia Mare, Titan's second largest sea, possesses a mirror-like smoothness, possibly due to a lack of winds.
- To paint a radar picture of Ligeia Mare, Cassini bounced radio waves off the sea's surface and then analyzed the echo. The strength of the reflected signal indicated how much wave action was happening on the sea. To understand why, Zebker said, imagine sunlight reflecting off of a lake on Earth. "If the lake were really flat, it would act as a perfect mirror and you would have an extremely bright image of the sun," he said. "But if you ruffle up the surface of the sea, the light gets scattered in a lot of directions, and the reflection would be much dimmer. We did the same thing with radar on Titan."
- One possible explanation for the sea's calmness is that no winds happened to be blowing across that region of the moon when Cassini made its flyby. Another possibility is that a thin layer of some material is suppressing wave action. "For example, on Earth, if you put oil on top of a sea, you suppress a lot of small waves," Zebker said.